



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,198	01/24/2007	Yoshiaki Kusunoki	1190-0761PUS1	5538
2292 7590 05/16/2011 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER HARVEY, DAVID E				
ART UNIT 2481		PAPER NUMBER		
NOTIFICATION DATE 05/16/2011		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

# Office Action Summary

**Application No.**

10/590,198

**Applicant(s)**

KUSUNOKI ET AL.

**Examiner**

DAVID E. HARVEY

**Art Unit**

2481

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 April 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-9 and 11-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-11, 13 and 14 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-945)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

1. **The finality of the last Office action has been withdrawn.**
2. **The following is a quotation of the second paragraph of 35 U.S.C. 112:**

**The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.**

1. **Claims 1, 2, and 4-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

**A) For the record:**

1) The examiner notes that, in addition to the "means for ..." terminology, the following non-exhaustive list of non-functional terms may likewise invoke Section 112-6:

- a) "mechanism for ...";
- b) "module for ...";
- c) "device for ...";
- d) "unit for ...";
- e) "component for ...";
- f) "element for ...";
- g) "member for ...";
- h) "apparatus for ..."
- i) "machine for...";
- j) "system for ...";
- k) etc,...

It is noted, however, that "circuit for" has been determined to be a "structural term" that does not invoke section 112-6.

[e.g., SEE: Federal Register/Vol.76, No. 26/Wednesday, February 9, 2011 @ first full paragraph of center column on page 7167]

It is further noted that alternative expressions substituted for "for" of a "[means] for" recitation (e.g., "adapted to", "configured to", etc,...) are insufficient denote

structure and, as such, are insufficient to avoid triggering the presumed interpretation/construction under Section 112-6 presumption.  
[e.g., Ex parte Rodriguez, 92 USPQ2d 1395].

2) For a computer-implemented means-plus-function claim limitation that invokes 35 112, sixth paragraph, the corresponding structure is required to be more than simply a general purpose computer or microprocessor.<sup>1</sup> The corresponding structure for a computer-implemented function must include the algorithm as well as the general purpose computer or microprocessor.<sup>2</sup> The written description of the specification must at least disclose the algorithm that transformed the general purpose microprocessor to a special purpose computer programmed to perform the claimed function.<sup>3</sup> Applicant may express the algorithm in any understandable terms including as a mathematical formula, in prose, in a flow chart, or in any manner that provides sufficient structure.<sup>4</sup>

**B) With respect to claim 1:**

1) The recited ***“recording device for ....”*** recited in lines 3-4 of claim 1 is construed as being a means plus function limitation that invokes 35 U.S.C. 112, sixth paragraph, given: that the claim limitation meets the 3-prong analysis set forth under section 2181 of the MPEP; and that which is set forth above in part “A” of this paragraph. It is noted that this recited “means” appears to correspond to the HDD drive shown “block 12” of Figure 1. As such, this recited device has been construed as being limited to an HDD drive (and equivalents thereof).

2) The recited ***“recording programming device for ....”*** recited in lines 4-6 of claim 1 is construed as being a means plus function limitation that invokes 35 U.S.C. 112, sixth paragraph, given: that the claim limitation meets the 3-prong analysis set forth under section 2181 of the MPEP; and given that which is set forth above in part “A” of this paragraph. It is noted that this recited “means” appears to correspond to “block 10” of Figure 1 and, more particularly block 28 of Figure 2 of the instant specification. However, the written description fails to clearly link or associate disclosed structure, material, or acts to the claimed function such that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function; e.g., the disclosure does not

---

<sup>1</sup> See *Aristocrat Technologies Inc. v. International Game Technology*, 521 F.3d 1328, 1333, 86 USPQ2d. 1235, 1239-1240 (Fed. Cir. 2008)

<sup>2</sup> See *WMS Gaming, Inc. v. International Game Technology*, 184 F.3d 1339, 51 USPQ2d. 1385 (Fed. Cir. 1999)

<sup>3</sup> See *Aristocrat*, 521 F.3d at 1338, 86 USPQ2d. at 1243.

<sup>4</sup> See *Finisar Corp. v The DIRECTV Group Inc*, 523 F.3d 1323, 1340, 86 USPQ2d. 1385 (Fed. Cir. 1999)

appear to set forth the specific structure/acts that comprises said blocks 10 and 28. As such, applicant is required to:

- a) Amend the claim so that the claim limitation will no longer be a means plus function limitation under 35 U.S.C. 112, sixth paragraph; or
- b) Amend the written description of the specification such that it clearly links or associates specific structure, material, or acts to the claimed function without introducing any new matter (35 U.S.C. 132(a)); or
- c) State on the record where the corresponding structure, material, or acts are set forth in the written description of the specification that perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

3) The recited ***"programming information acquisition device for ...."*** recited in lines 8-9 claim 1 is construed as being a means plus function limitation that invokes 35 U.S.C. 112, sixth paragraph, given: that the claim limitation meets the 3-prong analysis set forth under section 2181 of the MPEP; and that which is set forth above in part "A" of this paragraph. It is noted that this recited "means" appears to correspond corresponds to the acts described in paragraph 24 of the PG Publication. As such, this recited device has been construed as being limited to such acts (and equivalents thereof).

4) The recited ***"extension keyword search device for ...."*** recited in lines 10-13 of claim 1 is construed as being a means plus function limitation that invokes 35 U.S.C. 112, sixth paragraph, given: that the claim limitation meets the 3-prong analysis set forth under section 2181 of the MPEP; and given that which is set forth above in part "A" of this paragraph. It is noted that this recited "means" appears to correspond to "block 10" of Figure 1 performing an unspecified algorithm (e.g., @ S210 of Figure 8 and S106 of Figure 6. Thus, the written description fails to clearly link or associate disclosed structure, material, or acts to the claimed function such that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function; e.g., the disclosure does not appear to set forth the specific structure/acts that comprises said device. As such, applicant is required to:

- a) Amend the claim so that the claim limitation will no longer be a means plus function limitation under 35 U.S.C. 112, sixth paragraph; or
- b) Amend the written description of the specification such that it clearly links or associates specific structure, material, or acts to the claimed function without introducing any new matter (35 U.S.C. 132(a)); or
- c) State on the record where the corresponding structure, material, or acts are set forth in the written description of the specification that perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

4) The recited ***“delay device for ....”*** recited in lines 113-16 of claim 1 is construed as being a means plus function limitation that invokes 35 U.S.C. 112, sixth paragraph, given: that the claim limitation meets the 3-prong analysis set forth under section 2181 of the MPEP; and given that which is set forth above in part “A” of this paragraph. It is noted that this recited “means” appears to correspond to “block 10” of Figure 1 performing an unspecified algorithm (e.g., @ S111 of Figure 6 and S217 of Figure 8. Thus, the written description fails to clearly link or associate disclosed structure, material, or acts to the claimed function such that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function; e.g., the disclosure does not appear to set forth the specific structure/acts that comprises said device. As such, applicant is required to:

- a) Amend the claim so that the claim limitation will no longer be a means plus function limitation under 35 U.S.C. 112, sixth paragraph; or
- b) Amend the written description of the specification such that it clearly links or associates specific structure, material, or acts to the claimed function without introducing any new matter (35 U.S.C. 132(a)); or
- c) State on the record where the corresponding structure, material, or acts are set forth in the written description of the specification that perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

**B) With respect to claims 5, 6, and 7:**

These claims have like recitations and, therefor require like clarifications to those addressed above with respect to claim 1.

**3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #6,252,629 to Takatori et al. in view of Japanese Patent Document #2003/134431 to Kato (i.e., machine generated translation provided herewith).**

I. The showing of Takatori:

As is shown in Figure 1 [note lines 45-67 of column 7 and column 8], Takatori discloses an apparatus for recording television signal broadcasts that includes:

- 1) A recording device (@ 52);
- 2) A recording programming device (e.g., @ 200, 210, and 220);
- 3) A program information acquisition device (e.g., @ 51) for acquiring EPG information;
- 4) An keyword searching device (e.g., @ 54) which searches the EPG information to find programs of a genre that are likely to be extended/delayed thereby disrupting the start time of a subsequent program on that channel in time [note lines 11-67 of column 8]; and

5) A delay device (e.g., @ 55, 200, 56) which permits a delay to be added to the end time of the subsequent program, in response to the detection [note lines 59-67 of column 8].

wherein the system "sets" an "incremental extension time period" prior to the searching of the EPG. Specifically, as described, the system is set with a pre-stored standard/default "incremental extension time period" that is applied unless the user feels that the standard/default time period is not suitable [e.g., Note: lines 5-28 of column 11].

## II. Differences:

Claim 5 differs from the showing of Takatori only in that claim 5: recites that the keyword searching device is an extension keyword searching device that searches for a predetermined extension keyword; and that the extension keyword is a combination of at least two predetermined non-consecutive phrases separated by a number of characters.

## III. Obviousness:

Kato teaches that an EPG format for embedding extension/delay information had not been standardized and, as such, it was known to have searched the EPG data stream pertaining to earlier programs and performing analysis on the descriptions thereof to identify "keywords" that are indicative of extension/delay data content embedded therein so as to identify the programs that have been extended [note paragraphs 0065 and 0066 of the provided translation]. The examiner maintains that it would have been obvious to one of ordinary skill in the art to have modified the searching device in Takatori to search for embedded extension "keywords" as taught by Kato. The modification would have been advantageous in the detected extension keywords identify "actual" programming delays (as opposed to potential delays); i.e., motivation for the modification. As to the recited format of the character strings that represent the "keyword", the examiner maintains that the "analyzing of character strings" representing "descriptive content" described in Kato implicitly indicates that a multiple of phases/words are being analyzed. In this context, the examiner maintains that it would have been obvious for such strings to have at least non-consecutive words/phrases; i.e., noting, that there appears to be no criticality in the choice of "two non-consecutive phrases".



5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #6,252,629 to Takatori et al. in view of Japanese Patent Document #2003/134431 to Kato for the same reasons that were set forth above for claim 5.

6. Claims 8-11, 13, and 14 are allowed.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID E. HARVEY whose telephone number is (571) 272-7345. The examiner can normally be reached on M-F from 6:00AM to 3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Peter-Anthony Pappas, can be reached on (571) 272-7646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/DAVID E HARVEY/  
Primary Examiner, Art Unit 2481

DAVID E HARVEY  
Primary Examiner  
Art Unit 2481